The Big Six Quiz Solutions

QUESTION

Q1: An $80,000 mortgage loan is written at J2=7%, and has a two-year contractual term. Payments are to be made monthly and are based on a 10 year amortization period. Payments are rounded up to the next higher dollar. What is the size of the required payments?

Answer: $925

SOLUTION

	N 7
	P 2
	E
~~I/YR~~	P 12
~~P/YR~~	N
N	12x10 = 120
PV	80,000
FV	0
PMT	? → -924.751933

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QUESTION

Q2: Mike borrows $80,000 from a bank to set up a micro-brewery in his basement. It is an interest only loan with a 3 year term and monthly interest payments. The interest rate is J12 = 9%. How much are Mike's interest only payments every month?

Answer: $600

SOLUTION

I/YR	9
P/YR	12
N	12x3 = 36
PV	80,000
FV	-80,000
PMT	? → -600

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QUESTION

Q3: How much should an investor pay for a property that he expects to sell for $550,000 in three years if the investor wants to earn a yield of J2 = 10%?

Answer: $410,418.47

SOLUTION

I/YR	10
P/YR	2
N	2x3 = 6
PV	? → -410,418.468
FV	550,000
PMT	0

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QUESTION

Q4: Mr. Romney plans to build a restaurant and he requires $175,000 in construction financing. Trusty Mortgage Co. agreed to lend the money to Mr. Romney in the form of an interest accruing loan. Interest is to be charged at 7% per annum, compounded semi-annually. How much will Mr. Romney owe at the end of the 2 year term?

Answer: $200,816.53

SOLUTION

I/YR	7
P/YR	2
N	2x2 = 4
PV	175,000
FV	? → -200,816.525
PMT	0

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QUESTION

Q5: Emma wants to know how big of a mortgage she can afford if she can make monthly payments of $1,500. The mortgage rates are 4% per annum, compounded semi-annually, and the amortization period is 20 years.

Answer: $248,243.07

SOLUTION

	N 4
	P 2
	E
~~I/YR~~	P 12
~~P/YR~~	N
N	12x20 = 240
PV	? → 248,243.07
FV	0
PMT	-1,500